

CLAIMS

1. Use of a polypeptide for the manufacture of a medicament for the treatment and/or prevention of a fibrotic disease, wherein said polypeptide is selected from the group consisting of:
- 5 a) A polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 5, SEQ ID NO: 7, or SEQ ID NO: 10;
- b) The histidine tag form of the polypeptides whose sequences are recited in SEQ ID NO: 2 (SEQ ID NO: 3) or SEQ ID NO: 5 (SEQ ID NO: 6) or SEQ ID NO: 7 (SEQ ID NO: 8) or SEQ ID NO: 10 (SEQ ID NO: 11);
- 10 c) A polypeptide comprising any of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 10 or SEQ ID NO: 11;
- d) A mutein of any of (a) to (c), wherein the amino acid sequence has at least 40 % or 50 % or 60 % or 70 % or 80 % or 90 % identity to at least one of the sequences in (a) to (c);
- 15 e) A mutein of any of (a) to (c) wherein any changes in the amino acid sequence are conservative amino acid substitutions to the amino acid sequences in (a) to (c);
- f) A salt or an isoform, fusion protein, functional derivative, active fraction or circularly permuted derivative of any of (a) to (e).
2. Use of a nucleic acid molecule for the manufacture of a medicament for the treatment and/or prevention of a fibrotic disease, wherein said nucleic acid molecule comprises a nucleic acid sequence encoding a polypeptide as set forth in any of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 10 or SEQ ID NO: 11 and comprising a nucleic acid sequence selected from the group consisting of:
- 25 a) A nucleic acid sequence as set forth in any of SEQ ID NO: 1, SEQ ID NO: 4, or SEQ ID NO: 9;
- b) A nucleic acid sequence which hybridizes to the complement of the nucleic acid sequence of (a) under moderately stringent conditions or under highly stringent conditions;
- 30 c) A nucleic acid sequence of any of (a) or (b) wherein said nucleic acid sequence encodes an amino acid sequence having conservative amino acid substitutions to the amino acid sequences in SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 10 or SEQ ID NO: 11.

3. Use according to claim 1, wherein the polypeptide is glycosylated at one or more sites.
4. Use according to claim 1, wherein the fusion protein comprises an immunoglobulin (Ig) fusion.
- 5 5. Use according to claim 4, wherein the Ig fusion is an Fc fusion.
6. Use according to claim 1, wherein the functional derivative comprises at least one moiety attached to one or more functional groups, which occur as one or more side chains on the amino acid residues.
7. Use according to claim 6, wherein the moiety is a polyethylene moiety.
- 10 8. Use according to claim 2, wherein the nucleic acid molecule is comprised in an expression vector.
9. Use according to claim 8, wherein the vector is a gene therapy vector.
10. Use of a vector for inducing and/or enhancing the endogenous production of a polypeptide according to claim 1 in a cell for the preparation of a medicament for the treatment and/or prevention of a fibrotic disease.
- 15 11. Use of a cell comprising a nucleic acid molecule according to claim 2 for the preparation of a medicament for the treatment and/or prevention of fibrotic disease.
12. Use of a cell expressing a polypeptide according to claim 1 for the manufacture of a medicament for the treatment and/or prevention of a fibrotic disease.
- 20 13. The use according to claim 1 or 2, wherein the medicament further comprises osteoprotegerin, for simultaneous, sequential, or separate use.
14. The use according to claim 1 or 2, wherein the medicament further comprises an interferon, for simultaneous, sequential, or separate use.
15. The use according to claim 14, wherein the interferon is interferon- β .
- 25 16. The use according to claim 1 or 2, wherein the medicament further comprises a Tumor Necrosis Factor (TNF) antagonist for simultaneous, sequential, or separate use.
17. The use according to claim 16, wherein the TNF antagonist is TBPI and/or TBP11.
18. Use according to any of the preceding claims, wherein the fibrotic disease is a connective tissue disease, lung fibrosis or liver fibrosis.
- 30 19. Use according to claim 18, wherein the connective tissue disease is scleroderma.
20. The use according to claim 19, wherein the medicament further comprises an anti-scleroderma agent for simultaneous, sequential, or separate use.
21. The use according to claim 20, wherein the anti-scleroderma agent is selected from the group consisting of halofuginone, ACE inhibitors, calcium channel blockers,

proton pump inhibitors, NSAIDs such as ibuprofen, COX-inhibitors, corticosteroids such as prednisone, tetracycline, pentoxifylline, bucillamine, geranylgeranyl transferase inhibitors, rotterlin, prolyl-4-hydroxylase inhibitors, c-proteinase inhibitors, lysyl-oxidase inhibitors, relaxin, halofuginone, prostaglandins, prostacyclins, endothelin-1, nitric oxide, angiotensin II inhibitors, interleukin-10, interleukin-8, leukotriene B₄, ursodeoxycholic acid, anti-oxidants or SARP-1.

22. Method for treating and/or preventing a fibrotic disease, comprising administering to a patient in need thereof an effective amount of a substance according to claim 1 or 2, optionally together with a pharmaceutically acceptable carrier.

23. Method according to claim 22, wherein the fibrotic disease is a connective tissue disease, lung fibrosis or liver fibrosis.

24. Method according to claim 23, wherein the connective tissue disease is scleroderma.